

1990 Index

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This index covers all items — papers, correspondence, reviews, etc. — that appeared in this periodical during 1990, and items from previous years that were commented upon or corrected in 1990.

The *Author Index* contains the primary entry for each item, listed under the first author's name, and cross-references from all coauthors. The *Subject Index* contains several entries for each item under appropriate subject headings, and subject cross-references.

It is always necessary to refer to the primary entry in the *Author Index* for the exact title, coauthors, and comments/corrections.

AUTHOR INDEX

A

Agrawal, Divyakant, and Amr El Abbadi. Storage efficient replicated databases; *T-KDE Sep 90* 342-352

Alexander, William, see Boral, Haran, *T-KDE Mar 90* 4-24

B

Balou, Nathaniel, see Kim, Won, *T-KDE Mar 90* 109-124

Boral, Haran, William Alexander, Larry Clay, George Copeland, Scott Danforth, Michael Franklin, Brian Hart, Marc Smith, and Patrick Valdillez. Prototyping Bubba, a highly parallel database system; *T-KDE Mar 90* 4-24

Bricker, Allan, see DeWitt, David J., *T-KDE Mar 90* 44-62

C

Carey, Michael J., see Haas, Laura M., *T-KDE Mar 90* 143-160

Chang, Jin-Fu, see Chen, Shyi-Ming, *T-KDE Sep 90* 311-319

Chang, Shi-Kuo, see Deng, Yi, *T-KDE Sep 90* 295-310

Chang, Shi-Kuo, *Guest Ed.* Introduction to special section on knowledge engineering and software engineering; *T-KDE Sep 90* 271-272

Chang, Walter, see Haas, Laura M., *T-KDE Mar 90* 143-160

Chen, Shyi-Ming, Jyh-Sheng Ke, and Jin-Fu Chang. Knowledge representation using fuzzy Petri nets; *T-KDE Sep 90* 311-319

Chimenti, Danette, Ruben Gamboa, Ravi Krishnamurthy, Shamim Naqvi, Shalom Tsur, and Carlo Zaniolo. The *LDL* system prototype; *T-KDE Mar 90* 76-90

Chin, Yeh-Hao, see Huang, Yin-Fu, *T-KDE Dec 90* 431-435

Ciciani, Bruno, Daniel M. Dias, and Philip S. Yu. Analysis of replication in distributed database systems; *T-KDE Jun 90* 247-261

Clay, Larry, see Boral, Haran, *T-KDE Mar 90* 4-24

Cooke, D. E. Towards a formalism to produce a programmer assistant CASE tool (Concise p.); *T-KDE Sep 90* 320-326

Copeland, George, see Boral, Haran, *T-KDE Mar 90* 4-24

D

Dansforth, Scott, see Boral, Haran, *T-KDE Mar 90* 4-24

Delambre, Lois M. L., see Urban, Susan D., *T-KDE Dec 90* 391-400

Deng, Yi, and Shi-Kuo Chang. A *G*-net model for knowledge representation and reasoning; *T-KDE Sep 90* 295-310

Deux, O. The story of *O₂*; *T-KDE Mar 90* 91-108

DeWitt, David J., Shahram Ghandeharizadeh, Donovan A. Schneider, Allan Bricker, Hui-I Hsiao, and Rick Rasmussen. The Gamma Database Machine project; *T-KDE Mar 90* 44-62

Dias, Daniel M., see Ciciani, Bruno, *T-KDE Jun 90* 247-261

E

Eder, Johann. Extending SQL with general transitive closure and extreme value selections; *T-KDE Dec 90* 381-390

El Abbadi, Amr, see Agrawal, Divyakant, *T-KDE Sep 90* 342-352

F

Franklin, Michael, see Boral, Haran, *T-KDE Mar 90* 4-24

Froscher, Judith N., see Jacob, Robert J. K., *T-KDE Jun 90* 173-189

G

Gamboa, Ruben, see Chimenti, Danette, *T-KDE Mar 90* 76-90

Garcia-Molina, Hector, see Salem, Kenneth, *T-KDE Mar 90* 161-172

Garza, Jorge F., see Kim, Won, *T-KDE Mar 90* 109-124

Ghandeharizadeh, Shahram, see DeWitt, David J., *T-KDE Mar 90* 44-62

Ghosh, Subrata, see Sellis, Timos, *T-KDE Jun 90* 262-266

H

Haas, Laura M., Walter Chang, Guy M. Lohman, John McPherson, Paul F. Wilms, George Lapis, Bruce Lindsay, Hamid Pirahesh, Michael J. Carey, and Eugene Shekita. Starburst mid-flight: As the dust clears; *T-KDE Mar 90* 143-160

Hart, Brian, see Boral, Haran, *T-KDE Mar 90* 4-24

Hartzman, Carl S., and Carolyn R. Watters. A relational approach to querying data streams; *T-KDE Dec 90* 401-409

Hasan, Waqar, see Wilkinson, Kevin, *T-KDE Mar 90* 63-75

Hirohama, Michael, see Stonebraker, Michael, *T-KDE Mar 90* 125-142

Hsiao, Hui-I, see DeWitt, David J., *T-KDE Mar 90* 44-62

Huang, Yin-Fu, and Yeh-Hao Chin. A new methodology to evaluate locking protocols (Corresp.). *T-KDE Dec 90* 431-435

J

Jacob, Robert J. K., and Judith N. Froscher. A software engineering methodology for rule-based systems; *T-KDE Jun 90* 173-189

K

Ke, Jyh-Sheng, see Chen, Shyi-Ming, *T-KDE Sep 90* 311-319

Kim, Won, Jorge F. Garza, Nathaniel Ballou, and Darrell Woelk. Architecture of the ORION next-generation database system; *T-KDE Mar 90* 109-124

Kim, Won. Object-oriented databases: Definition and research directions; *T-KDE Sep 90* 327-341

Krishnamurthy, Ravi, see Chimenti, Danette, *T-KDE Mar 90* 76-90

L

Lakshmi, M. Seetha, and Philip S. Yu. Effectiveness of parallel joins; *T-KDE Dec 90* 410-424

Lapis, George, see Haas, Laura M., *T-KDE Mar 90* 143-160

Lindsay, Bruce, see Haas, Laura M., *T-KDE Mar 90* 143-160

Lohman, Guy M., see Haas, Laura M., *T-KDE Mar 90* 143-160

Lyngbæk, Peter, see Wilkinson, Kevin, *T-KDE Mar 90* 63-75

M

Maletic, Jonathan I., see Reynolds, Robert G., *T-KDE Sep 90* 273-282

Malvestuto, Francesco M., and Marina Moscarini. Query evaluability in statistical databases (Concise p.); *T-KDE Dec 90* 425-430

Mannino, Michael V., and Leonard D. Shapiro. Extensions to query languages for graph traversal problems; *T-KDE Sep 90* 353-363

McPherson, John, see Haas, Laura M., *T-KDE Mar 90* 143-160

Mi, Peiwei, and Walt Scacchi. A knowledge-based environment for modeling and simulating software engineering processes; *T-KDE Sep 90* 283-294

Moscarini, Marina, see Malvestuto, Francesco M., *T-KDE Dec 90* 425-430

Motro, Amihai. FLEX: A tolerant and cooperative user interface to databases; *T-KDE Jun 90* 231-246

N

Naqvi, Shamim, see Chimenti, Danette, *T-KDE Mar 90* 76-90

P

Paul, Heinz-Bernhard, see Schek, Hans-Joerg, *T-KDE Mar 90* 25-43

Pirahesh, Hamid, see Haas, Laura M., *T-KDE Mar 90* 143-160

Porvin, Stephen E., see Reynolds, Robert G., *T-KDE Sep 90* 273-282

R

- Raghavan, Vijay V., *see* Saxton, Lawrence V., *T-KDE Jun 90* 210-219
 Ramamoorthy, C. V., *Ed.-in-Chief*, and Benjamin W. Wah, *Assoc. Ed.-in-Chief*. Editor's comments: The first 14 months (Edtl.); *T-KDE Sep 90* 269-270
 Ramamoorthy, C. V., *Ed.-in-Chief*, and Benjamin W. Wah, *Assoc. Ed.-in-Chief*. Editor's comments; *T-KDE Dec 90* 369
 Rasmussen, Rick, *see* DeWitt, David J., *T-KDE Mar 90* 44-62
 Reynolds, Robert G., Jonathan I. Maletic, and Stephen E. Porvin. PM: A system to support the automatic acquisition of programming knowledge; *T-KDE Sep 90* 273-282
 Roman, Grulia-Catalin. Formal specification of geographic data processing requirements; *T-KDE Dec 90* 370-380
 Rowe, Lawrence A., *see* Stonebraker, Michael, *T-KDE Mar 90* 125-142

S

- Salem, Kenneth, and Hector Garcia-Molina. System M: A transaction processing testbed for memory resident data; *T-KDE Mar 90* 161-172
 Sarda, Nandlal L. Extensions to SQL for historical databases; *T-KDE Jun 90* 220-230
 Saxton, Lawrence V., and Vijay V. Raghavan. Design of an integrated information retrieval/database management system; *T-KDE Jun 90* 210-219
 Scacchi, Walt, *see* Mi, Peiwei, *T-KDE Sep 90* 283-294
 Schek, Hans-Joerg, Heinz-Bernhard Paul, Marc H. Scholl, and Gerhard Weikum. The DASDBS project: Objectives, experiences, and future prospects; *T-KDE Mar 90* 25-43
 Schneider, Donovan A., *see* DeWitt, David J., *T-KDE Mar 90* 44-62
 Scholl, Marc H., *see* Schek, Hans-Joerg, *T-KDE Mar 90* 25-43
 Seetha Lakshmi, M., *see* Lakshmi, M. Seetha
 Sellis, Timos, and Subrata Ghosh. On the multiple-query optimization problem (Concise p.); *T-KDE Jun 90* 262-266
 Shapiro, Leonard D., *see* Mannino, Michael V., *T-KDE Sep 90* 353-363
 Shekita, Eugene, *see* Haas, Laura M., *T-KDE Mar 90* 143-160
 Smith, Marc, *see* Boral, Haran, *T-KDE Mar 90* 4-24
 Stachour, Paul D., and Bhavani Thuraisingham. Design of LDV: A multilevel secure relational database management system; *T-KDE Jun 90* 190-209
 Stonebraker, Michael, Lawrence A. Rowe, and Michael Hirohama. The implementation of POSTGRES; *T-KDE Mar 90* 125-142
 Stonebraker, Michael, *Guest Ed.* Introduction to special issue on database prototype systems; *T-KDE Mar 90* 1-3

T

- Thuraisingham, Bhavani, *see* Stachour, Paul D., *T-KDE Jun 90* 190-209
 Tsur, Shalom, *see* Chimenti, Danette, *T-KDE Mar 90* 76-90

U

- Urban, Susan D., and Lois M. L. Delcambre. Constraint analysis: A design process for specifying operations on objects; *T-KDE Dec 90* 391-400

V

- Valduriez, Patrick, *see* Boral, Haran, *T-KDE Mar 90* 4-24

W

- Wah, Benjamin W., *Assoc. Ed.-in-Chief*, *see* Ramamoorthy, C. V., *Ed.-in-Chief*, *T-KDE Sep 90* 269-270
 Wah, Benjamin W., *Assoc. Ed.-in-Chief*, *see* Ramamoorthy, C. V., *Ed.-in-Chief*, *T-KDE Dec 90* 369
 Watters, Carolyn R., *see* Hartzman, Carl S., *T-KDE Dec 90* 401-409
 Weikum, Gerhard, *see* Schek, Hans-Joerg, *T-KDE Mar 90* 25-43
 Wilkinson, Kevin, Peter Lyngbæk, and Waqar Hasan. The Iris architecture and implementation; *T-KDE Mar 90* 63-75
 Wilms, Paul F., *see* Haas, Laura M., *T-KDE Mar 90* 143-160
 Woelk, Darrell, *see* Kim, Won, *T-KDE Mar 90* 109-124

Y

- Yu, Philip S., *see* Ciciani, Bruno, *T-KDE Jun 90* 247-261
 Yu, Philip S., *see* Seetha Lakshmi, M., *T-KDE Dec 90* 410-424

Z

- Zaniolo, Carlo, *see* Chimenti, Danette, *T-KDE Mar 90* 76-90

SUBJECT INDEX**B****Bibliographies**

- DASDBS (Darmstadt database system); project objectives, experiences, and future prospects. Schek, Hans-Joerg, +, *T-KDE Mar 90* 25-43
 LDL (Logic Data Language) system prototype using integrated relational database and logic programming technologies. Chimenti, Danette, +, *T-KDE Mar 90* 76-90
 object-oriented databases; definition and research directions. Kim, Won, *T-KDE Sep 90* 327-341
 prototyping Bubba, highly parallel database system. Boral, Haran, +, *T-KDE Mar 90* 4-24
 Starburst relational database management system; prototype design and implementation. Haas, Laura M., +, *T-KDE Mar 90* 143-160
Business economics; cf. Computer economics

C**CASE**; cf. Computer-aided software engineering**Cognitive science**

- G-net model for knowledge representation and reasoning in office information system design. Deng Yi, +, *T-KDE Sep 90* 295-310

Computer-aided software engineering

- knowledge-based environment for modeling and simulating software engineering processes. Mi, Peiwei, +, *T-KDE Sep 90* 283-294
 knowledge engineering and software engineering (special section). *T-KDE Sep 90* 271-326

- PM (Partial Metrics) system for supporting automatic acquisition of programming knowledge. Reynolds, Robert G., +, *T-KDE Sep 90* 273-282
 weak specification method that provides formal foundation for CASE programmer assistant. Cooke, D. E., *T-KDE Sep 90* 320-326

Computer economics

- fragmentation method for reducing storage overhead of replicated objects. Agrawal, Divyakant, +, *T-KDE Sep 90* 342-352

Computer interfaces

- FLEX, relational database interface for users with varying levels of expertise. Motro, Amihai, *T-KDE Jun 90* 231-246

Computer languages; cf. Query languages**Computer maintenance**; cf. Software maintenance**Computer operating systems**; cf. Software, operating systems**Computer pipeline processing**; cf. Pipeline processing**D****Data communication**; cf. Data security**Data-flow computing**

- Gamma database machine; design and implementation. DeWitt, David J., +, *T-KDE Mar 90* 44-62
 prototyping Bubba, highly parallel database system. Boral, Haran, +, *T-KDE Mar 90* 4-24

Data management; cf. Database management systems; Distributed database management systems**Data models**

- constraint analysis; design process for specifying operations on objects. Urban, Susan D., +, *T-KDE Dec 90* 391-400

- DASDBS (Darmstadt database system); project objectives, experiences, and future prospects. Schek, Hans-Joerg, +, *T-KDE Mar 90* 25-43
 historical database management system using extension of SQL. Sarda, Nandlal L., *T-KDE Jun 90* 220-230

- implementation of POSTGRES object-oriented database systems. Stonebraker, Michael, +, *T-KDE Mar 90* 125-142

- Iris object-oriented DBMS; architecture and implementation. Wilkinson, Kevin, +, *T-KDE Mar 90* 63-75

Data processing

- formal specification of geographic data processing requirements. Roman, Grulia-Catalin, *T-KDE Dec 90* 370-380

Data security

- LOCK Data Views (LDV), multilevel secure relational database management system; design. Stachour, Paul D., +, *T-KDE Jun 90* 190-209

Data structures

- DASDBS (Darmstadt database system); project objectives, experiences, and future prospects. Schek, Hans-Joerg, +, *T-KDE Mar 90* 25-43

Database machines

- database prototype systems (special issue). *T-KDE Mar 90* 1-172
 effectiveness of parallel processing of relational join operations. Lakshmi, M. Seetha, +, *T-KDE Dec 90* 410-424

- Gamma database machine; design and implementation. DeWitt, David J., +, *T-KDE Mar 90* 44-62

- prototyping Bubba, highly parallel database system. *Boral, Haran, +, T-KDE Mar 90 4-24*
- system M, transaction processing testbed for memory-resident data. *Salem, Kenneth, +, T-KDE Mar 90 161-172*
- Database management systems**
- DASDBS (Darmstadt database system); project objectives, experiences, and future prospects. *Schek, Hans-Joerg, +, T-KDE Mar 90 25-43*
 - database prototype systems (special issue). *T-KDE Mar 90 1-172*
 - evaluating locking-based concurrency protocols using average lock range criterion. *Huang Yin-Fu, +, T-KDE Dec 90 431-435*
 - historical database management system using extension of SQL. *Sarda, Nandlal L., T-KDE Jun 90 220-230*
 - implementation of POSTGRES object-oriented database systems. *Stonebraker, Michael, +, T-KDE Mar 90 125-142*
 - integrated information retrieval/database management system. *Saxton, Lawrence V., +, T-KDE Jun 90 210-219*
 - Iris object-oriented DBMS; architecture and implementation. *Wilkinson, Kevin, +, T-KDE Mar 90 63-75*
 - DDL (Logic Data Language) system prototype using integrated relational database and logic programming technologies. *Chimenti, Danette, +, T-KDE Mar 90 76-90*
 - LOCK Data Views (LDV), multilevel secure relational database management system; design. *Stachour, Paul D., +, T-KDE Jun 90 190-209*
 - O₂ object-oriented database system; description and prototype evaluation. *Deux, O., T-KDE Mar 90 91-108*
 - ORION object-oriented database system; architecture. *Kim, Won, +, T-KDE Mar 90 109-124*
 - Starburst relational database management system; prototype design and implementation. *Haas, Laura M., +, T-KDE Mar 90 143-160*
- Database management systems; cf.** Distributed database management systems
- Database security; cf.** Data security
- Database system fault tolerance**
- system M, transaction processing testbed for memory-resident data. *Salem, Kenneth, +, T-KDE Mar 90 161-172*
- Database systems**
- query processing; relational approach to querying data streams. *Hartzman, Carl S., +, T-KDE Dec 90 401-409*
- Database systems; cf.** Data models; Data structures; Database management systems; Distributed database systems
- Database systems, concurrency operations; cf.** Distributed database systems, concurrency operations
- Database systems, object-oriented**
- architecture of ORION next-generation database system. *Kim, Won, +, T-KDE Mar 90 109-124*
 - constraint analysis; design process for specifying operations on objects. *Urban, Susan D., +, T-KDE Dec 90 391-400*
 - implementation of POSTGRES object-oriented database systems. *Stonebraker, Michael, +, T-KDE Mar 90 125-142*
 - Iris object-oriented DBMS; architecture and implementation. *Wilkinson, Kevin, +, T-KDE Mar 90 63-75*
 - O₂ object-oriented database system; description and prototype evaluation. *Deux, O., T-KDE Mar 90 91-108*
 - review of object-oriented databases; definition and research directions. *Kim, Won, T-KDE Sep 90 327-341*
- Database systems, query processing**
- DASDBS (Darmstadt database system); project objectives, experiences, and future prospects. *Schek, Hans-Joerg, +, T-KDE Mar 90 25-43*
 - effectiveness of parallel processing of relational join operations. *Lakshmi, M. Seetha, +, T-KDE Dec 90 410-424*
 - extending SQL with general transitive closure and extreme-value selections. *Eder, Johann, T-KDE Dec 90 381-390*
 - FLEX, relational database interface that tolerates incorrect input. *Motro, Amihai, T-KDE Jun 90 231-246*
 - Iris object-oriented DBMS; architecture and implementation. *Wilkinson, Kevin, +, T-KDE Mar 90 63-75*
 - LDL (Logic Data Language) system prototype using integrated relational database and logic programming technologies. *Chimenti, Danette, +, T-KDE Mar 90 76-90*
 - multiple-query optimization problem in database management systems. *Sellis, Timos, +, T-KDE Jun 90 262-266*
 - ORION object-oriented database system; architecture. *Kim, Won, +, T-KDE Mar 90 109-124*
 - query evaluability in statistical databases. *Malvestuto, Francesco M., +, T-KDE Dec 90 425-430*
- Database systems, query processing; cf.** Distributed database systems, query processing
- Database systems, relational**
- DASDBS (Darmstadt database system); project objectives, experiences, and future prospects. *Schek, Hans-Joerg, +, T-KDE Mar 90 25-43*
 - database prototype systems (special issue). *T-KDE Mar 90 1-172*
 - effectiveness of parallel processing of relational join operations. *Lakshmi, M. Seetha, +, T-KDE Dec 90 410-424*
 - FLEX, relational database interface for users with varying levels of expertise. *Motro, Amihai, T-KDE Jun 90 231-246*
 - LDL (Logic Data Language) system prototype using integrated relational database and logic programming technologies. *Chimenti, Danette, +, T-KDE Mar 90 76-90*
 - LOCK Data Views (LDV), multilevel secure relational database management system; design. *Stachour, Paul D., +, T-KDE Jun 90 190-209*
 - O₂ object-oriented database system; description and prototype evaluation. *Deux, O., T-KDE Mar 90 91-108*
 - query processing; relational approach to querying data streams. *Hartzman, Carl S., +, T-KDE Dec 90 401-409*
 - Starburst relational database management system; prototype design and implementation. *Haas, Laura M., +, T-KDE Mar 90 143-160*
- Database systems, relational; cf.** Distributed database systems, relational; Query languages
- Database systems, searching; cf.** Query languages
- Distributed computing; cf.** Distributed database systems
- Distributed database management systems**
- prototyping Bubba, highly parallel database system. *Boral, Haran, +, T-KDE Mar 90 4-24*
- Distributed database system fault tolerance**
- fragmentation method for reducing storage overhead of replicated objects. *Agrawal, Divyakant, +, T-KDE Sep 90 342-352*
 - Gamma database machine; design and implementation. *DeWitt, David J., +, T-KDE Mar 90 44-62*
- Distributed database systems**
- fragmentation method for reducing storage overhead of replicated objects. *Agrawal, Divyakant, +, T-KDE Sep 90 342-352*
- Distributed database systems; cf.** Distributed database management systems
- Distributed database systems, concurrency operations**
- analysis of replication in distributed database systems. *Ciciani, Bruno, +, T-KDE Jun 90 247-261*
- Distributed database systems, query processing**
- Gamma database machine; design and implementation. *DeWitt, David J., +, T-KDE Mar 90 44-62*
- Distributed database systems, relational**
- Gamma database machine; design and implementation. *DeWitt, David J., +, T-KDE Mar 90 44-62*
 - prototyping Bubba, highly parallel database system. *Boral, Haran, +, T-KDE Mar 90 4-24*
- Distributed information systems; cf.** Distributed database systems

E

- Economics; cf.** Computer economics
- Expert systems**

knowledge-based environment for modeling and simulating software engineering processes. *Mi, Peiwei, +, T-KDE Sep 90 283-294*

method for developing maintainable rule-based expert systems. *Jacob, Robert J. K., +, T-KDE Jun 90 173-189*

F

- File systems; cf.** Data structures
- Fuzzy set theory**

knowledge representation using fuzzy Petri nets. *Chen, Shyi-Ming, +, T-KDE Sep 90 311-319*

G**Geographic information systems**

formal specification of geographic data processing requirements. *Roman, Gruia-Catalin, T-KDE Dec 90 370-380*

Graph theory

constraint analysis; design process for specifying operations on objects. *Urban, Susan D., +, T-KDE Dec 90 391-400*

extensions to query languages for graph traversal problems. *Mannino, Michael V., +, T-KDE Sep 90 353-363*

query evaluability in statistical databases. *Malvestuto, Francesco M., +, T-KDE Dec 90 425-430*

H**History**

historical database management system using extension of SQL. *Sarda, Nandlal L., T-KDE Jun 90 220-230*

I**IEEE Transactions on Knowledge and Data Engineering**list of reviewers for 1989. *T-KDE Sep 90* 364-366**Information retrieval**integrated information retrieval/database management system. *Saxton, Lawrence V.*, +, *T-KDE Jun 90* 210-219**Information systems; cf. Database systems; Geographic information systems; Office automation****K****Knowledge acquisition**PM (Partial Metrics) system for supporting automatic acquisition of programming knowledge. *Reynolds, Robert G.*, +, *T-KDE Sep 90* 273-282**Knowledge-based systems; cf. Expert systems****Knowledge representation**formal specification of geographic data processing requirements. *Roman, Gruia-Catalin*, *T-KDE Dec 90* 370-380G-net model for knowledge representation and reasoning in office information system design. *Deng Yi*, +, *T-KDE Sep 90* 295-310
knowledge representation using fuzzy Petri nets. *Chen, Shyi-Ming*, +, *T-KDE Sep 90* 311-319**L****Logic**formal specification of geographic data processing requirements. *Roman, Gruia-Catalin*, *T-KDE Dec 90* 370-380**Logic programming**LDL (Logic Data Language) system prototype using integrated relational database and logic programming technologies. *Chimenti, Danette*, +, *T-KDE Mar 90* 76-90**M****Maintenance; cf. Software maintenance****Memory management**system M, transaction processing testbed for memory-resident data. *Salem, Kenneth*, +, *T-KDE Mar 90* 161-172**Multiprocessing**effectiveness of parallel processing of relational join operations. *Lakshmi, M. Seetha*, +, *T-KDE Dec 90* 410-424**Multiprocessing; cf. Data-flow computing****N****Networks; cf. Petri nets****O****Object-oriented programming**O₂ object-oriented database system; description and prototype evaluation. *Deux, O.*, *T-KDE Mar 90* 91-108**Office automation**G-net model for knowledge representation and reasoning in office information system design. *Deng Yi*, +, *T-KDE Sep 90* 295-310**Operating systems; cf. Software, operating systems****P****Parallel processing; cf. Data-flow computing; Pipeline processing****Petri nets**G-net model for knowledge representation and reasoning in office information system design. *Deng Yi*, +, *T-KDE Sep 90* 295-310knowledge representation using fuzzy Petri nets. *Chen, Shyi-Ming*, +, *T-KDE Sep 90* 311-319**Pipeline processing**LOCK Data Views (LDV), multilevel secure relational database management system; design. *Stachour, Paul D.*, +, *T-KDE Jun 90* 190-209**Privacy; cf. Data security****Programming; cf. Software design/development****Protocols**evaluating locking-based concurrency protocols using average lock range criterion. *Huang Yin-Fu*, +, *T-KDE Dec 90* 431-435fragmentation method for reducing storage overhead of replicated objects. *Agrawal, Divyakan*, +, *T-KDE Sep 90* 342-352**Q****Query languages**extending SQL with general transitive closure and extreme-value selections. *Eder, Johann*, *T-KDE Dec 90* 381-390extensions to query languages for graph traversal problems. *Mannino, Michael V.*, +, *T-KDE Sep 90* 353-363historical database management system using extension of SQL. *Sarda, Nandlal L.*, *T-KDE Jun 90* 220-230implementation of POSTGRES object-oriented database systems. *Stonebraker, Michael*, +, *T-KDE Mar 90* 125-142LDL (Logic Data Language) system prototype using integrated relational database and logic programming technologies. *Chimenti, Danette*, +, *T-KDE Mar 90* 76-90**S****Security; cf. Data security****Set theory; cf. Fuzzy set theory**

Software; cf. Database management systems; Distributed database management systems

Software, operating systemsprototyping Bubba, highly parallel database system. *Boral, Haran*, +, *T-KDE Mar 90* 4-24**Software design/development**LOCK Data Views (LDV), multilevel secure relational database management system; design. *Stachour, Paul D.*, +, *T-KDE Jun 90* 190-209method for developing maintainable rule-based expert systems. *Jacob, Robert J. K.*, +, *T-KDE Jun 90* 173-189**Software design/development; cf. Computer-aided software engineering****Software maintenance**method for developing maintainable rule-based expert systems. *Jacob, Robert J. K.*, +, *T-KDE Jun 90* 173-189**Software requirements and specifications**formal specification of geographic data processing requirements. *Roman, Gruia-Catalin*, *T-KDE Dec 90* 370-380weak specification method that provides formal foundation for CASE programmer assistant. *Cooke, D. E.*, *T-KDE Sep 90* 320-326**Special issues/sections**database prototype systems. *T-KDE Mar 90* 1-172knowledge engineering and software engineering (special section). *T-KDE Sep 90* 271-326**Statistical databases**query evaluability in statistical databases. *Malvestuto, Francesco M.*, +, *T-KDE Dec 90* 425-430

Call for Papers

Special Section on Self-Organizing Knowledge and Data Representation in Distributed Environments

This issue focuses on self organizing representations of knowledge and data and the associated high performance information processing algorithms and performance evaluation metrics. Original results are solicited in neural networks, artificial intelligence and genetic algorithms, with emphasis placed on synergistic relationships which exist among these topics. The following related areas are covered:

- Self-organizing and self-replicating data and knowledge representations;
- Dynamic control in static knowledge representations, such as production rules and large-scale knowledge bases;
- Evidential and non-monotonic reasoning with self-organizing data/knowledge representations;
- Performance metrics for assessing self-organizing knowledge/data representation in terms of access time, capacity, and reliability;
- Innovative applications in areas which involve self-organizing representations, such as robotics, diagnostic tools, and national defense;
- Parallel, distributed implementations in hardware/software.

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IMPORTANT DATES

July 1, 1991	Due date for six (6) copies of the full manuscript
September 1, 1991	Notification of acceptance
October 1, 1991	Date date for final revised manuscript
March 1992	Publication of special section

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The IEEE TRANSACTIONS ON KNOWLEDGE AND DATA ENGINEERING is an archival journal published quarterly. The information published in this TRANSACTIONS is designed to inform researchers, developers, managers, strategic planners, users, and others interested in state-of-the-art and state-of-the-practice activities in the knowledge and data engineering area. We are interested in well-defined theoretical results and empirical studies that have potential impact on the acquisition, management, storage, and graceful degeneration of knowledge and data; as well as in provision of knowledge and data services. We welcome treatments of the role of knowledge and data in the development and use of information systems and in the simplification of software and hardware development and maintenance. Since the journal is archival, it is assumed that the ideas presented are important, have been well analyzed and/or empirically validated, and are of value to the knowledge and data engineering research community.

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